

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A closed loop heating system for a nipple aspirate fluid aspiration device, comprising a plurality of inflatable bladders configured to provide circumferential compression of a breast for the expression of intraductal fluid; a reservoir; and a fluid flow path comprising an inflow line and an outflow line for placing the bladders in fluid communication with the reservoir; wherein the entire closed loop heating system can be operated and removed without exposing a fluid within said closed loop to the outside of the closed loop system; wherein each bladder has an inflated width of no more than about 3 inches and an inflated length of no more than about 4 inches; and wherein said fluid flow path comprises a movable wall such that fluid in the system can be moved by application of external pressure to the movable wall.
2. (Previously Presented) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 1, wherein the reservoir comprises a movable wall.
3. (Previously Presented) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 2, wherein the reservoir comprises a compressible container.
4. (Previously Presented) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 1, comprising at least 3 inflatable bladders.
5. (Previously Presented) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 1, comprising at least 6 inflatable bladders.
6. (Previously Presented) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 1, further comprising a heat exchange fluid contained within the closed loop.
7. (Cancelled)
8. (Previously Presented) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 1, wherein each bladder has an inflated width of no more than about 2 inches and an inflated length of no more than about 3 inches.
9. (Previously Presented) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 4, wherein each bladder has an inflated thickness of no more than about 2 inches.

10. (Previously Presented) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 9, wherein each bladder has an inflated thickness of no more than about 1 inch.

11. (Previously Presented) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 1, wherein the fluid flow path comprises a first conduit extending between the bladders and the reservoir and a second conduit extending between the bladders and the reservoir.

12. (Currently Amended) An array of inflatable bladders for use in a breast pump, comprising:

at least a first and a second inflatable bladder in a series flow path configured to provide circumferential compression of a breast for the expression of intraductal fluid;

a flow path extending between the first and second bladder;

a reservoir;

and a flow path comprising an inflow line and an outflow line between the reservoir and the first and second bladder; said flow path comprising a movable wall such that a fluid in the system can be moved by application of external pressure to the movable wall;

wherein each bladder has an inflated width of no more than about 3 inches and an inflated length of no more than about 4 inches;

and wherein said array can be removed from operative association with a pump without exposing the fluid within said array to the outside of the array of inflatable bladders.

13. (Currently Amended) A closed loop heating system for a nipple aspirate fluid aspiration device, comprising a plurality of inflatable bladders configured to provide a circumferential compressive force anatomically adjacent to a lactiferous sinus of a breast for the purpose of expressing intraductal fluid; a reservoir; and a fluid flow path comprising an inflow line and an outflow line for placing the bladders in fluid communication with the reservoir; wherein the entire closed loop heating system can be operated and removed without exposing a fluid within said closed loop to the outside of the closed loop system; and wherein said fluid flow

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path comprises a movable wall such that fluid in the system can be moved by application of external pressure to the movable wall.

14. (Previously Presented) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 13, wherein the reservoir comprises a movable wall.

15. (Previously Presented) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 14, wherein the reservoir comprises a compressible container.

16. (Previously Presented) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 13, comprising at least 3 inflatable bladders.

17. (Previously Presented) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 13, comprising at least 6 inflatable bladders.

18. (Previously Presented) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 13, further comprising a heat exchange fluid contained within the closed loop.

19. (Previously Presented) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 16, wherein each bladder has an inflated width of no more than about 3 inches and an inflated length of no more than about 4 inches.

20. (Previously Presented) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 19, wherein each bladder has an inflated width of no more than about 2 inches and an inflated length of no more than about 3 inches.

21. (Previously Presented) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 16, wherein each bladder has an inflated thickness of no more than about 2 inches.

22. (Previously Presented) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 21, wherein each bladder has an inflated thickness of no more than about 1 inch.

23. (Previously Presented) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 13, wherein the fluid flow path comprises a first conduit extending between the bladders and the reservoir and a second conduit extending between the bladders and the reservoir.

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24. (Currently Amended) An array of inflatable bladders for use in a breast pump, comprising:

at least a first and a second inflatable bladder configured to provide a circumferential compressive force to a breast anatomically adjacent to a lactiferous sinus of a breast for the purpose of expressing intraductal fluid;

a flow path extending between the first and second bladder;
a reservoir;

and a flow path comprising an inflow line and an outflow line between the reservoir and the first and second bladder; said flow path comprising a movable wall such that a fluid in the system can be moved by application of external pressure to the movable wall;

wherein said array can be removed from operative association with a pump without exposing the fluid within said array to the outside of the array of inflatable bladders.

25. (Previously Presented) A closed loop heating system for a nipple aspirate fluid aspiration device, comprising a plurality of inflatable bladders configured to provide radially symmetrical compression of a breast along a longitudinal axis for the purpose of expressing intraductal fluid; a reservoir; and a fluid flow path comprising an inflow line and an outflow line for placing the bladders in fluid communication with the reservoir; wherein the entire closed loop heating system can be operated and removed without exposing a fluid within said closed loop to the outside of the closed loop system; and wherein said fluid flow path comprises a movable wall such that fluid in the system can be moved by application of external pressure to the movable wall.

26. (Previously Presented) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 25, wherein the reservoir comprises a movable wall.

27. (Previously Presented) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 25, wherein the reservoir comprises a compressible container.

28. (Previously Presented) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 25, comprising at least 3 inflatable bladders.

29. (Previously Presented) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 25, comprising at least 6 inflatable bladders.

30. (Previously Presented) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 25, further comprising a heat exchange fluid contained within the closed loop.

31. (Previously Presented) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 28, wherein each bladder has an inflated width of no more than about 3 inches and an inflated length of no more than about 4 inches.

32. (Previously Presented) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 31, wherein each bladder has an inflated width of no more than about 2 inches and an inflated length of no more than about 3 inches.

33. (Previously Presented) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 28, wherein each bladder has an inflated thickness of no more than about 2 inches.

34. (Previously Presented) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 33, wherein each bladder has an inflated thickness of no more than about 1 inch.

35. (Previously Presented) A closed loop heating system for a nipple aspirate fluid aspiration device as in Claim 25, wherein the fluid flow path comprises a first conduit extending between the bladders and the reservoir and a second conduit extending between the bladders and the reservoir.

36. (Previously Presented) An array of inflatable bladders for use in a breast pump, comprising:

at least a first and a second inflatable bladder configured to produce radially symmetrical compression of a breast around a longitudinal axis for the purpose of expressing intraductal fluid;

a flow path extending between the first and second bladder;

a reservoir;

and a flow path comprising an inflow line and an outflow line between the reservoir and the first and second bladder; said flow path comprising a movable wall such

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that a fluid in the system can be moved by application of external pressure to the movable wall;

wherein said array can be removed from operative association with a pump without exposing the fluid within said array to the outside of the array of inflatable bladders.